



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

RESPONSIVENESS SUMMARY

For

Air Quality Control Permit Number 1000169

Issued To

El Paso Natural Gas Company, Dutch Flat Compressor Station

Begin EPA Public Comment : September 28, 1997

End EPA Public Comment : November 12, 1997

The following comments were made by the EPA, as received on December 9, 1997.

Comments on Attachment A : General Provisions

Comment 1: Attachment A. Section III.B.5. Permit Revision, Reopening, Revocation, and Reissuance, or Termination for Cause. In order to clarify the permit requirements for the source, this section should state that, apart from reopenings to include new applicable requirements, a reopening does not result in resetting the 5-year permit term. Note that when a permit is reopened to include new applicable requirements, the entire permit must go through the public review process to reset the 5-year permit term.

Response: To clarify that permit reopenings do not result in resetting the five-year term, except for permit reopenings to include new applicable requirements, Section III.B.5 has been revised as follows:

- (i) Section III.B.5 has been renamed as Section III.C
- (ii) The following sentence has been added to the language:

"Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Attachment shall not result in a resetting of the five year permit term."

Comment 2: Attachment A. Section XIII. Reporting Requirements. As the permit is currently written, the permittee is referred first to Attachment B, and subsequently to Attachment A to determine the reporting requirements. To provide clarification for the source, language should be included which explicitly states that reports of required monitoring should be submitted every 6 months, in addition to permit deviation reporting required by Attachment A, Section XI.

Response: To clarify the reporting requirements of the permit for the source, Section XIII has been rewritten to read as follows:

"Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

- (i) Compliance certifications pursuant to Attachment A, Section VII of this permit.
- (ii) Permit deviation reporting pursuant to Attachment A, Sections XIA, XLB, and XLC of this permit.

(iii) Reporting requirements listed in Attachment B, Section III of this permit.”

Note: Making this modification results in Section III.B of Attachment "B" becoming redundant. Therefore, it was deleted.

Comment 3: Attachment A. Section XVI. Facility Change Without Permit Revision. While changes made to this section due to past EPA comments have been useful, we feel further revisions are necessary. We are concerned that ADEQ may not be made aware of changes that should be processed as a permit revision, but which the source mistakenly believes it can make without a permit revision or notification to ADEQ. As written, the permit slightly contradicts itself. Section XVI.C states “Changes that meet the criteria listed in subsections A, B, and C.1 of this Section are exempt from the notification requirements.” Immediately following this, Section C.1 says “Examples of changes that do not require notification”. While the first statement lists specific criteria a change must meet to avoid notification requirements, the words “Examples of” in the second statement allow a wide range of changes that do not require notification. This wide range of changes may allow changes to inadvertently slip past ADEQ without review. Thus, the words “Examples of” in Section XVI.C.1 should be omitted to narrow the changes exempt from notification requirements. Also, this section should state that a source may be required to prove a modification meets the criteria for exemption from the notification requirement.

Response: ADEQ agrees with EPA on this comment. To clarify the meaning of Section XVI, the following two changes have been made:

- (i) The last sentence of Section XVI.C has been deleted
- (ii) Section XVI.C.1 has been deleted.

With these changes, the permit does not address facility changes which would not require notification to ADEQ. ADEQ is committed to working one-on-one with various industrial source groups to develop lists of such facility changes that would not require notification.

In addition to these changes, the review process revealed that the permit shield exemption for facility changes without revisions and minor revisions had been omitted from the permit. Consequently, Section XX of Attachment A of the permit now reads as follows (also see response to Comment 5:

"Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment “C” of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment."

Comment 4: Attachment A. Section XVII.B. Testing Requirements. The first sentence of this section should be changed to read "Performance tests shall reflect representative operational conditions unless other conditions are provided in the applicable test o in this permit". Also, the EPA would like to clarify the definition of "performance tests", especially given the exclusion during start-up, shutdown and malfunction. Performance tests are used to demonstrate compliance. However, the EPA does not interpret this permit condition to prohibit testing during periods of start-up, shutdown, and malfunction, for enforcement action purposes. Please let us know if ADEQ has a different understanding of the meaning of this permit condition.

Response: To clarify the intent of the testing requirements, Section XVII has been modified to read as follows:

XVII TESTING REQUIREMENTS

[A.A.C.R18-2-312]

A. Operational Conditions During Testing

Tests shall be conducted during operation at the normal rated capacity of each unit, while operating at representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

B. Test Plan.....

Comment 5: Attachment A. Section XX. Permit Shield. The permit shield language in this section is very general, and could be interpreted to broadly apply to every requirement mentioned in the permit. Furthermore, the permit shield language as written could be assumed to apply to applicable requirements that are not included or addressed in the permit. There are two options for correcting this problem.

The first solution is to add language to Section XX which defines the applicable requirements as those listed in Attachment C. The new permit condition should read "Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as listed in Attachment "C", as of the date of permit issuance." Additionally, Attachment "C" must be modified to meet the requirements laid out in Comment #10 of this letter. A permit shield may not be provided for a given rule or portion of a rule unless the shielded requirement is fully captured by a permit condition (or is explicitly deemed not applicable).

The second solution is to completely eliminate Section XX in Attachment A, and instead explicitly request a permit shield in Attachment C. Again Attachment C must be modified to meet the requirements laid out in Comment #10 of this letter.

Response: Permit shield language (Section XX, Attachment A) modified to read as:

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment.

In accordance with this change, Section II.A which now reads:

"The Permittee shall comply with all conditions of this permit, which sets forth all applicable requirements of Arizona air quality statutes and air quality rules...."

has been modified to read as:

"The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules...."

Comments on Attachment B: Specific Conditions

Comment 13: Attachment B. Section IV.C. Testing Requirements. As explained in Comment #9 of the enclosed previous comment letter, "alternate and equivalent test methods" must be clearly defined in the permit. This applies for all required testing, regardless of where the testing requirement is given. Because the EPA does not have a copy of the current state rules, it is unclear what is contained in

Articles 9 and 11, and why an exception was made for these sections.

Response: Sections IV.B and C of Attachment B now read as follows:

TESTING REQUIREMENTS

B. Permittee shall use the following EPA approved reference test methods to conduct performance tests for the specified pollutants:

Nitrogen Oxides. EPA Reference Method 20.

C. The Permittee may submit an alternate and equivalent test method(s) that is listed in 40 CFR Subpart 60, Appendix A, to the Director in a test plan, for approval by the Director.

Comments on Attachment C: Applicable Regulations

Comment 9: As described in Comment # 5 above, there are two options for obtaining a permit shield. If Section XX (Permit Shield) of Attachment A is deleted completely, then Attachment C must include language that explicitly states a permit shield is granted to the permittee. For either option, an adoption date of the version of each rule that is being shielded from must be included in Attachment C.

Response: Please see Response to Comment 5. Attachment C now states : "Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements **in effect on the date of permit issuance:.....**".

Comments on Attachment E: Insignificant Activities

Comment 15: This section lists units which may be considered to be "insignificant activities". The purpose of defining insignificant activities is to specify those activities for which there may be less detail provided in the permit application. Ant insignificant activities at a Title V source are still subject to all applicable requirements. Some of the insignificant activities listed in Attachment E may be subject to generally applicable requirements, such as limits on opacity or requirements to control fugitive dust. To the extent that these insignificant activities are subject to unit-specific or generally applicable requirements, the permit must include these requirements and require these units to comply with these requirements. Attachment E should clearly state that these units are subject to all applicable requirements, and to the requirements of this permit. These units are also subject to the other requirements of Part 70, such as monitoring and compliance certifications. Please see White Paper 2, which addresses to what extent part 70 requirements may be minimized for these units.

Response: AAC R18-2-101.54 defines an "insignificant activity" as follows:

"Insignificant activity" means an activity in an emissions unit that is not otherwise subject to any applicable requirement and which belongs to one of the following categories:

- a. Landscaping.....etc.
- b. Gasoline storage tanks.....etc.
- c. Diesel and.....etc.
- d. Batch mixers.....etc.
- e. Wet sand.....etc.

- f. Hand-held or manually operated equipment.....etc.
- g. Powder....etc.
- h. Internal...etc.
- I. Lab equipment....etc.
- j. Any other activity which the Director determines is not necessary, because of it's emissions due to size or production rate, to be included in an application in order to determine all applicable requirements and to calculate any fee under this Chapter.

From this definition, it can be seen that under Arizona rules for a unit to qualify as an insignificant activity, there should be no generally applicable requirements that the source may be subject to.

Comment 16: Technical Support Document. The technical support document should provide a clear and concise explanation of all requirements in the permit. We found most of this document to be clear and concise, but are concerned by the justification given for excluding PM and opacity monitoring requirements on the turbines engines. Instead of giving data to defend ADEQ's decision, the technical support document refers the reader to a "preceding discussion". While today it is relatively simple to find the "preceding discussion" in earlier technical support documents, through the years (as facilities shut down, etc.) these documents may become much less accessible. Given the small amount of data involved for justification, EPA suggests that ADEQ include the data in each permit's technical support document. Alternatively, ADEQ can make a more specific reference to the exact permit that contains the "preceding discussion". If this option is chosen, ADEQ must ensure that any referenced material is readily available.

Response: ADEQ understands EPA's concern and will make all efforts to ensure that any referenced material is readily available. However, "preceding discussion" as stated in the technical support document was meant to refer the reader back to Section II.B of the technical support document where the justification in terms of numeric data is given and not refer to any outside material as was interpreted by the EPA. A clarification has been made to specify the reference.

The following comment #17 was submitted by the EPA on December 9, 1997:

Attachment B, Section I.A. Emission Limits/Standards. Several applicable requirements from permit (#65039) issued by ADEQ on January 25, 1993 have been excluded. For example, the 20% opacity limit established for the Taurus, Centaur turbines, and Waukesha auxiliary engines needs to be included in the Title V Permit. Please review all other conditions of previous permits for this facility (fuel amount, performance tests, etc.) to be sure all applicable requirements are captured in the Title V Permit.

APPLICABLE REQUIREMENTS FROM INSTALLATION PERMIT #65039

Permit Condition 1

Attachment B., Section II.B. Emission Limits

On and after the date of startup, EPNG shall not cause to be discharged into the atmosphere from the Taurus, Centaur H or Waukesha stacks any gases which exhibit greater than 20% opacity.

ADEQ response:

Prior to the implementation of the new air quality program which is based on the 1990 Clear Air Act Amendments, ADEQ issued permits based on their old program. These permits contained conditions beyond an applicable requirement. Often, permits issued were not based on any applicable rules or laws and were mostly arbitrary. Now that Arizona has been implementing the new program, which has more defined regulations and limitations that can be included in the permit, every effort has been made to carefully check those permit conditions which have no basis for inclusion in a permit. Furthermore, the facility has not undergone any physical or operational changes since the issuance of the previous permit.

Further, detailed conformity checks between the old program and the new program revealed no basis for the 20% opacity limit for natural gas turbines. Nor is the opacity required by the State Implementation Plan (SIP), or any state or federal requirements. The limit was not used to avoid triggering an applicable requirement, such as Prevention of Significant Deterioration (PSD). Nor was it based on any modeling results designated to protect the National Air Ambient Air Quality Standards in Section 110(a)(2)(C) of the Clean Air Act. The Taurus and Centaur H turbines are subject to New Source Performance Standards, 40 CFR 60, Subpart GG, which does not have an opacity limit for affected facilities. The Waukesha generators are subject to AAC R18-2-719, for which there is an opacity standard of 40%. The Title V permitting process has afforded ADEQ the opportunity to correctly apply the applicable limitations to permits which were incorrectly applied in the past, for which this is an example. ADEQ therefore has not included the condition in the Title V permit.

Permit Condition 2

Attachment B, Section IV.B Performance Tests

Performance tests for the emissions of nitrogen oxides and carbon monoxide shall be conducted and results reported in accordance with the test methods set forth in AAC R18-2-801.1 and 801.35...

ADEQ response:

This was a time-based condition that applied to only initial testing and has since expired. An annual performance test for NOx is required in accordance with 40 CFR 60.335. There is no annual test required for CO because there are no standards to verify the results with. Further, the potential emissions are below the major source thresholds. The Arizona Testing Manual requires annual testing of all major points at a facility and rotational testing for minor points. Hence, the

requirement for testing CO has not been included.

Permit Condition 3

Attachment B, Section V. Fuel Type

EPNG is only permitted to burn Sweet Natural Gas in the two Waukesha electrical generators, the Solar Taurus gas turbine and the Solar Centaur H gas turbine. This natural gas shall not contain more than 0.25 grains of H₂S per 100 SCF as determined by the most current ASTM Method, or equivalent method approved by the Department.

ADEQ response:

ADEQ used terms and conditions as submitted in the permit application by the facility. The term “Sweet Natural Gas” is not defined in Arizona regulations. To eliminate confusion, this requirement is replaced by our current rules which require the source to combust pipeline quality natural gas.

Permit Condition 4

Attachment B, Section VI. Fuel Amount and Recordkeeping

- A. *EPNG shall not consume more than 54,257 scf/hr (at 59 degrees F) of natural gas in the Solar Taurus gas turbine compressor.*
- B. *EPNG shall not consume more than 48,030 scf/hr (at 59 degrees F) of natural gas in the Solar Centaur H gas turbine compressor.*
- C. *EPNG shall not consume more than 4,008 scf/hr (at 59 degrees F) of natural gas in either of the Waukesha electrical generators.*

ADEQ response:

Prior to the implementation of the new air quality program which is based on the 1990 Clean Air Act, ADEQ issued permits based on their old program. These permits contained conditions beyond an applicable requirement. Often, permits issued were not based on any applicable rules or laws and were mostly arbitrary. The fuel limits may have been used as a means of demonstrating compliance with the standards which, for past purposes, was the potential to emit. Limiting a source to their PTE's is unnecessary and measuring fuel consumption is overly burdensome for the source. Calculations show that the maximum horsepower corresponds to this fuel consumption.

The limits were not used to avoid triggering an applicable requirement, such as Prevention of Significant Deterioration (PSD), nor were they based on any modeling results designated to protect the National Air Ambient Air Quality Standards in Section 110(a)(2)(C) of the Clean Air Act. Hence, the limits have not been included in the Title V permit.

Permit Condition 5

Attachment B, Section VII. Fuel Analysis

The fuel-bound nitrogen content of the natural gas burned at the Dutch Flat compressor station shall not exceed 0.015 percent by weight as determined by the most current ASTM Method, or equivalent method approved by the Department.

The amount of fuel burned and the sulfur and nitrogen content of the fuel burned shall be recorded in a permanent record and shall be available for periodic inspection by the Department.

ADEQ response:

The requirement to determine the fuel-bound nitrogen content has been waived per EPA Memorandum *Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG*, August 14, 1987. The sulfur content recordkeeping has been substituted by the requirement to keep a copy of the FERC tariff agreement, since the agreement has more stringent sulfur content requirements than our regulations. For fuel consumption recordkeeping requirements, see ADEQ response to Permit Condition 4.

Permit Condition 6

Attachment B, Section IX.A Other Conditions

Only (1) Waukesha Model F2895GL electrical generator is permitted to continuously operate at any time.
...

ADEQ response:

EPNG was previously permitted to operate only one of the two electrical generators. However, EPNG operates only one generator on a regular basis and used the other as a standby or emergency use. Under our new regulations, Arizona has defined emergency generators as an insignificant activity and therefore included it in the list of Insignificant Activities. Therefore, the need to include this condition is not required.